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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,717	11/13/2001	Thomas Schupp	4-30582C/D6C	7406
1095	7590	10/15/2003	EXAMINER	
THOMAS HOXIE NOVARTIS, CORPORATE INTELLECTUAL PROPERTY ONE HEALTH PLAZA 430/2 EAST HANOVER, NJ 07936-1080			NASHED, NASHAAT T	
		ART UNIT		PAPER NUMBER
		1652		<i>T</i>
DATE MAILED: 10/15/2003				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/014,717	Applicant(s) Schupp et al.		
	Examiner Nashaat T. Nashed	Art Unit 1652		
-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --				
Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>three</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.				
- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).				
Status				
1) <input checked="" type="checkbox"/> Responsive to communication(s) filed on <u>Mar 21, 2002</u>				
2a) <input type="checkbox"/> This action is FINAL . 2b) <input checked="" type="checkbox"/> This action is non-final.				
3) <input type="checkbox"/> Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213.				
Disposition of Claims				
4) <input checked="" type="checkbox"/> Claim(s) <u>94-103</u> is/are pending in the application.				
4a) Of the above, claim(s) _____ is/are withdrawn from consideration.				
5) <input type="checkbox"/> Claim(s) _____ is/are allowed.				
6) <input checked="" type="checkbox"/> Claim(s) <u>94-103</u> is/are rejected.				
7) <input type="checkbox"/> Claim(s) _____ is/are objected to.				
8) <input type="checkbox"/> Claims _____ are subject to restriction and/or election requirement.				
Application Papers				
9) <input type="checkbox"/> The specification is objected to by the Examiner.				
10) <input type="checkbox"/> The drawing(s) filed on _____ is/are a) <input type="checkbox"/> accepted or b) <input type="checkbox"/> objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).				
11) <input type="checkbox"/> The proposed drawing correction filed on _____ is: a) <input type="checkbox"/> approved b) <input type="checkbox"/> disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action.				
12) <input type="checkbox"/> The oath or declaration is objected to by the Examiner.				
Priority under 35 U.S.C. §§ 119 and 120				
13) <input type="checkbox"/> Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) <input type="checkbox"/> All b) <input type="checkbox"/> Some* c) <input type="checkbox"/> None of: 1. <input type="checkbox"/> Certified copies of the priority documents have been received. 2. <input type="checkbox"/> Certified copies of the priority documents have been received in Application No. _____. 3. <input type="checkbox"/> Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).				
*See the attached detailed Office action for a list of the certified copies not received.				
14) <input checked="" type="checkbox"/> Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). a) <input type="checkbox"/> The translation of the foreign language provisional application has been received.				
15) <input checked="" type="checkbox"/> Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.				
Attachment(s)				
1) <input type="checkbox"/> Notice of References Cited (PTO-892)				
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)				
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s). <u>3</u>				
4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____				
5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)				
6) <input type="checkbox"/> Other: _____				

The application has been amended as requested in the communication filed March 21, 2002. Accordingly, claims 1-93 have been canceled, and claims 94-103 have been entered.

Claims 94-103 are pending and under consideration in this Office action.

Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

An application in which the benefits of an earlier application are desired must contain a specific reference to the prior application(s) in the first sentence of the specification or in an application data sheet (37 CFR 1.78(a)(2) and (a)(5)).

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 94-103 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The following are the reasons for the rejections:

- (a) The phrase "an epothilone" in claim 94 renders the claims indefinite because the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. The specification does not define the phrase by any general formula, and one of ordinary skill in the art would not be able to define the phrase. It is noted that the specification defines the word epothilone on page 21, paragraph 3, but the definition would encompass any sixteen member ring macrolactone structure including epothilone A and B, and analogs thereof. Thus, the phrase "an epothilone" is taken to mean any chemical compound which shares any structure feature to epothilone A and B.
- (b) Claims 94-103 are incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: transforming the host cell with the gene epoF which encodes epothilone macrolactone oxidase. Without epoF neither epothilone A or B can be made by the host cell described in claim 94.

The following is a quotation of the first paragraph of 35 U.S.C. § 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 94-103 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 94-103 are directed to a recombinant method of making any "epothilone" and analogue thereof using a recombinant host cell transformed with epoA, epoP, epoB, epoC, epoD, and epoE genes. The specification, however, only provides a single representative species encompassed by these claims. It describes the preparation of the natural products, i. e., epothilone A and epothilone B, of the gene cluster comprising all the genes of the gene cluster summarized in Table 1 on page 40 and epoA, epoP, epoB, epoC, epoD, epoE, and epoF genes. There is no disclosure of any particular structure to function/activity relationship in the single disclosed species. The specification also fails to describe additional representative species of the epothilones which can be made by the gene cluster or even how to make epothilone A and epothilone B without the epoF gene. Given this lack of additional representative species as encompassed by the claims, Applicants have failed to sufficiently describe the claimed invention, in such full, clear, concise, and exact terms that a skilled artisan would recognize Applicants were in possession of the claimed invention.

No claim is allowed.

Allowable subject matter:

Claims directed to a method of obtaining epothilone A and epothilone B using a transformed cell with the entire gene cluster including epoA, epoP, epoB, epoC, epoD, epoE, and epoF genes would be considered favorably.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nashaat T. Nashed, Ph. D. whose telephone number is (703) 305-6586. The examiner can normally be reached Monday, Tuesday, Thursday, and Friday from 9:00 a.m. to 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapura Achutamurthy, can be reached on (703) 308-3804. The fax phone numbers for this Group are (703) 305-3014 and (703)308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.



Nashaat T. Nashed, Ph. D.
Primary Examiner